

IODINE DEFICIENCY DISORDERS AND SALT IODIZATION (IDD/USI) IN AZERBAIJAN



**Final Report
January 2006**

1. EXECUTIVE SUMMARY

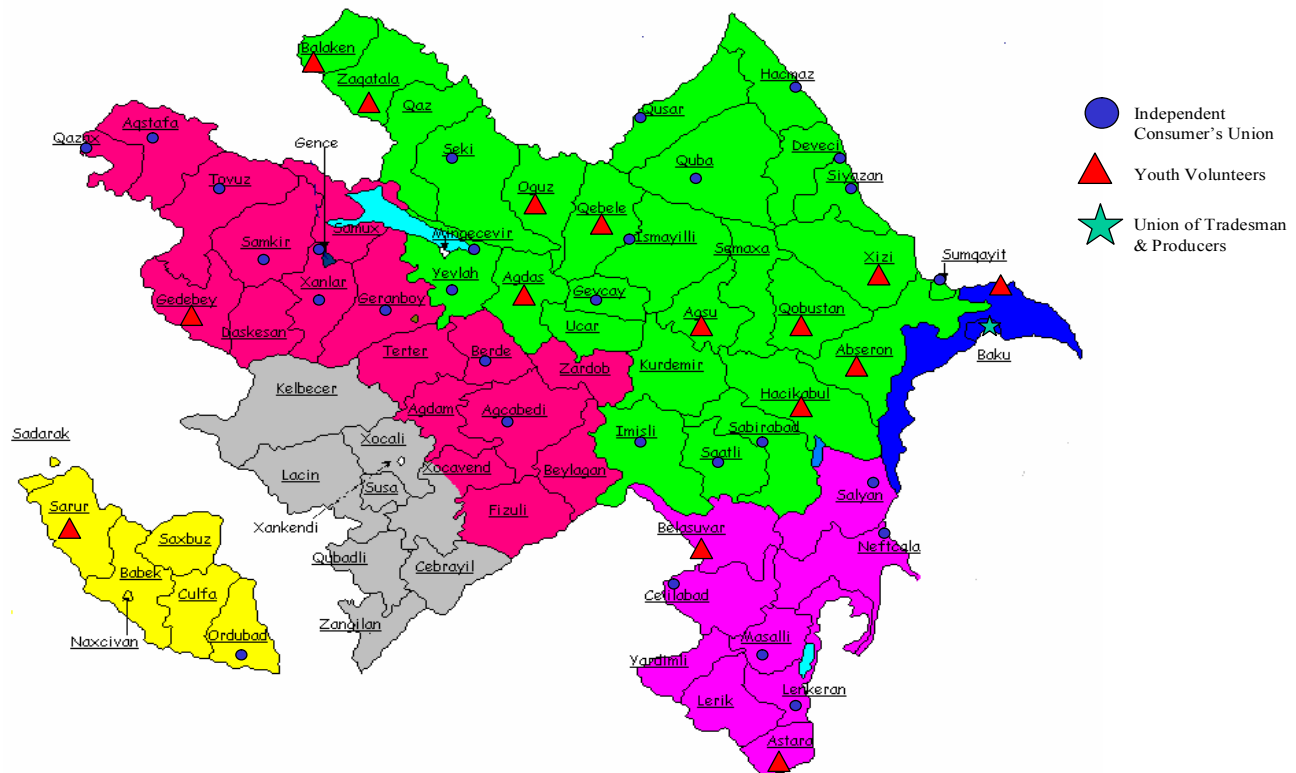
With support of USAID, UNICEF started in January 2003 a two-year Iodine Deficiency Disorders and Salt Iodization (IDD/USI) project together with MOH. The objectives were to achieve universal iodization of all salt used for human and animal consumption; to increase the awareness of public through community education on the importance of iodized salt consumption; to train health personnel in high-risk areas; to increase the capacity for quality assurance, control and monitoring; mobilization of all sectors including salt producers and importers (private and governmental), government ministries, provincial authorities, NGOs and community leaders; to improve salt producers capacity to produce iodized salt; to improve knowledge and capacity of salt importers and to improve the assessment and monitoring system.

A decision was made that the project should in its first phase target the Senior Government officials to raise awareness on the importance of the IDD and iodization of salt as a most efficient and effective intervention; profit oriented sector both private and governmental convinced that their contribution will have a direct impact on the elimination of iodine deficiency disorders, thus in turn on the well-being of children and women in the country. Workshops, meetings and conferences were held including salt producers, salt importers and other partners. Community leaders, teachers and NGOs were actively involved in project activities. Schools were the main entry points for the social mobilization and education activities.

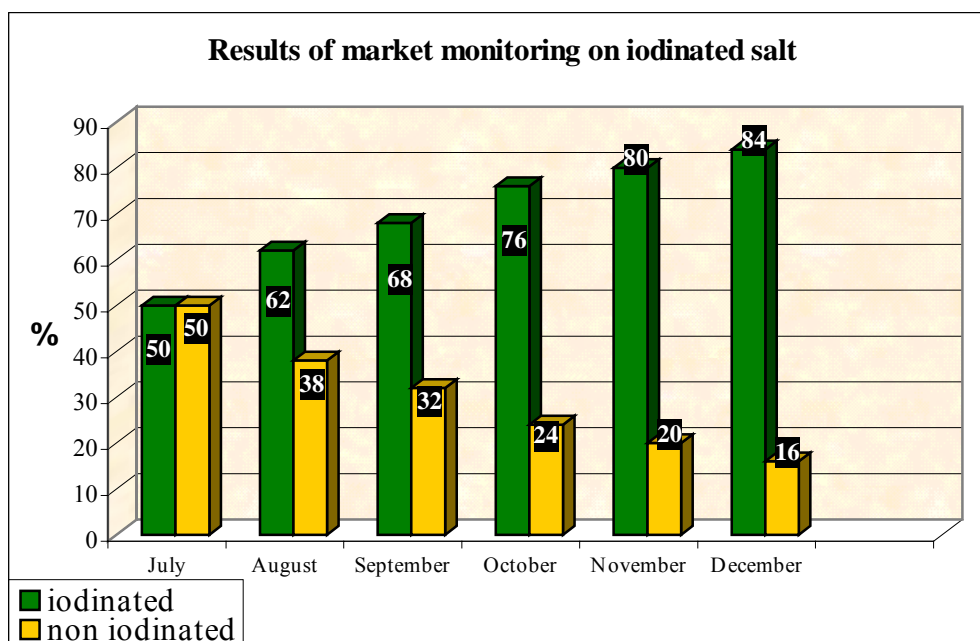
The Azerbaijan Multiple Indicator Cluster Survey (MICS) in 2000 showed that amongst surveyed households, only 41.3% had adequately iodized salt. Iodized salt production started in Azerbaijan in 1991. Before this, all iodized salt was imported from other regions in the Soviet Union. Today an estimated 30-40 thousand tons of iodized salt is needed annually, most of which is imported mainly from Ukraine with small amounts produced locally in Azerbaijan.

As a result of implemented activities the consumption of iodized salt at households increased from 44% (2002) to 70 % in 2003 and selling of iodized salt at the market increased from 30% (2002) to 68% in 2003 bringing the commitment of universal salt iodization by end 2003 almost close. Monitoring results conducted by the youth volunteers in 16 districts showed that 89.1% of salt tested in the markets was iodized, 76.2% of consumers at the markets had interest in iodized salt, 82% of the market sellers said that they advised their customers to purchase iodized salt, 72% of cafes and restaurants visited used iodized salt, 60.9% of families used iodized salt regularly, 25% use iodized salt occasionally, 86.2% of families said that iodized salt was available at their local market, 65% of families interviewed could explain the need for using iodized salt and 66% knew how to keep iodized salt and the best way to use iodized salt so that its iodine content was kept to the maximum.

Monitoring of Iodized Salt production, availability and consumption by districts, Azerbaijan, 2003 (UNICEF/MOH/NGOs/Youth Volunteers)



According to monitoring results 2004 collected by NGOs consumption of iodized salt at households increased from 70% in 2003 to 84% in 2004. The latest market monitoring data from the Independent Consumer Union (2005) - shows that up to 84% of salt on the market is iodized, and just 16% is non-iodized – attributes the non-iodized salt to the following sources: 2% is illegally imported from abroad, and 14% is locally produced (as illustrated in the graph below).



The latest WFP Food Security and Nutrition Survey 2005 reported that in rural areas the prevalence of goitre was found to range between 11% and 46%. The Median urinary iodine excretion survey from 13 regions conducted in 1998-9 similarly recorded a high prevalence of goitre (86%) particularly in the mountain regions of the Caucasus.

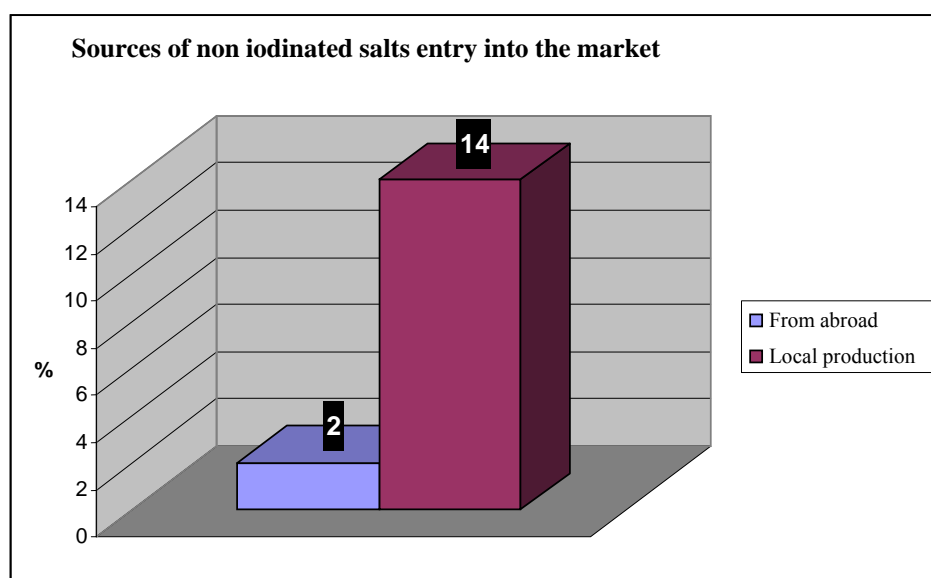
In the Master Plan of Operations framework the project objectives for 2000-2004 were: to eliminate IDD among population of the country; to implement iodization of all salt used for human and animal consumption (USI); to mobilize all sectors including salt producers (private and governmental), government ministries, provincial authorities, NGO's and community leaders to reach the goal of IDD elimination; and to provide iodine supplements in endemic areas.

In 2003, the Parliament of the Republic of Azerbaijan passed the law on Prevention of Iodine Deficiency Disorders (IDD). This law gives a legal basis for introduction of nationwide system of IDD elimination through universal salt iodization (USI). An Article 8.3 of the above-mentioned Law (effective of January 2003) defines that "import, sale and production of non-iodized salt for nutrition and fodder purposes to the territory of the Republic of Azerbaijan shall be prohibited". The IDD Law proves the government commitment to eliminate IDD through USI in Azerbaijan in the coming years.

The implementation of legislation on IDD elimination through USI requires strengthening of existing monitoring system for tracking both progress indicators (related to production, distribution and quality of iodized salt) and impact indicators (relating to biological effects of iodine supplementation).

Article 5.0.1. of the Law requires regular monitoring, on the annual basis, of IDD and the efficiency of preventive measures as well as reporting of the results to the concerned bodies. Another Article (6.2.) stipulates quality and safety monitoring of iodized salt.

Several regulatory documents were developed and approved to facilitate the process of salt iodization. The Government of Azerbaijan and UNICEF made significant efforts to improve the IDD/USI monitoring system. The Centres for Hygiene and Epidemiology now have responsibility for inspection and sample testing, as well as program promotion. The MoH also initiated discussions with the food industry to increase usage of iodized salt and promoted legislation that requires mandatory salt iodization. Salt producers and Centres for Hygiene and Epidemiology received technical support and were provided with portable devices for testing iodine in salt. UNICEF also provided necessary equipment and reagents for the national urinary iodine laboratory. At the same time salt producers and Center of Hygiene and Epidemiology received technical support and were provided with laboratories for testing of iodine in salt. Stakeholders, including Head of Parliamentary Commission for Social Policy, Deputy Minister of Health, other ministerial officials, salt producers, health and nutrition specialists, representatives of civic organizations, showed high level of commitment to implement national legislation of IDD prevention and attain the goal of virtual IDD elimination in coming years.



2. SITUATION OF CHILDREN AND WOMEN IN AZERBAIJAN

Political developments in the country centered around the November parliamentary elections. Despite tentative optimism, in the event the elections were widely criticised, and at one point led to outright factional fighting with the arrest of key government officials.

Growing oil wealth surrounding the Baku-Ceyphan pipeline is consequently serving to reinforce the position of the current elites, posing a major obstacle to political and economic reforms and to development outside of the petroleum sector. GDP was projected to grow by 19% in 2005 largely driven by the energy sector, and is expected to increase threefold over the next five years. The substantial economic benefits of increasing production run the risk of being squandered should authorities fail to address issues of patronage and corruption, and uneven financial and monetary

management¹. Furthermore, over-dependence on the oil sector may negatively affect the long-term development of the non-oil sector, and the overall economy. Despite the considerable macroeconomic GDP gains in the energy sector, they are failing to generate significant employment. A government study in 2004, based on a Household Budget Survey, estimates that 46.7% of the population lives below the poverty line². Growth in the non-oil sectors remains limited.

Due to the unresolved conflict with Armenia, displacement from the conflict in 1991 continues to cause human suffering today. There are approximately 800,000 internally displaced persons (IDPs) and refugees from Armenia and other countries, over one half of them women. Displacement confers a high degree of vulnerability, with levels of poverty that are 20 per cent percent higher than the national average. Approximately one fifth of the country's territory of 86.6 thousands square km is still controlled by Armenia. IDPs have specific assistance and protection needs resulting from their loss of homes, shelter, livelihood and social security and their consequent dependence on assistance from the Government or external agencies. In 2005, the Government of Azerbaijan continued a new programme, the State Plan to improve conditions of refugees and IDPs, using financing from the State Oil fund.

Analysts are widely optimistic that 2006 will see progress or the achievement of a peace agreement between Azerbaijan and Armenia, given that there are no elections scheduled in any of the countries party to the negotiating framework. The details of such an agreement are unclear, as are the implications for Azerbaijan. While some immediate returns may be expected, requiring considerable assistance in all sectors, large-scale returns would be unlikely in the short-term considering the presence of landmines, lack of services, and the duration of displacement, and the possibility of a phased peace agreement.

Following on from the State Programme of Poverty Reduction and Economic Development, the ten-year State Programme on Poverty Reduction and Sustainable Development, for the period 2006-2015, is set to start at the beginning of 2006. The government in 2005 has begun preparations in this regard, also consulting relevant UN agencies. Priorities and targets have been drafted in several sectors relevant to UNICEF, and a Plan of Action will be developed in 2006. UNICEF will continue to support the government in this regard and will go on advocating on the basis of its mandate.

BASIC DATA	
Child population (millions, under 18 years)	2,864,400
U5MR (per 1,000 live births) (2001-02)	88.4 (RHS, 1996-2000) 24.1 (SSC, 2004)
U1MR(per 1,000 live birth)	74.4 (RHS, 1996-2000) 9,8 (SSC, 2004)

¹ Crisis Group Europe Briefing, No. 40, 21 November 2005: Azerbaijan's 2005 Elections: Lost Opportunity

² Quoted from WFP Azerbaijan: Food Security and Nutritional Survey, 2004. This figure refers to the 'absolute poverty line of 17500AZM.

Maternal mortality ratio (per 100,000 live births)	76 (MICS, 2000); 25,7 (SSC, 2004)
Vitamin A deficiency	81% (survey data)
One-year-olds immunized against DPT3 (%) 2004	96.3%
One-year-olds immunized against measles (%) 2004	94.5%

Significant discrepancies between the official and survey figures on infant mortality have raised the issue of non-registration of children at birth. Many parents, particularly in remote areas do not register their children until they reach a school age.

Informal payments for registration and low child-allowances de-motivate parents in this regard. Moreover, coordination within government structures is not well maintained; as a result discrepancies also exist within government figures. Studies suggest that as much as 15% of births in the country may go unregistered illustrating the need for awareness-raising among parents and increasing motivation amongst duty bearers at lower levels.

Child survival is perhaps the most pressing challenge facing the country. Respiratory disease is the main killer of infants, accounting for approximately one half of total deaths, with diarrhoeal diseases as the second most frequent cause. Malnutrition rates measured by the 2000 MICS survey were significant. One in six children under five years of age is underweight and almost one fifth of children are stunted. Children's poor nutritional status is one of the major underlying causes of child mortality.

UNICEF had planned to conduct a MICS survey in 2005, which was delayed so as to combine it with a Demographic Health Survey (DHS), in conjunction with USAID and the Government of Azerbaijan, to begin in 2006. The DHS will provide baseline data for the ten-year State Programme on Poverty Reduction and Sustainable Development.

3. ACHIEVEMENTS AND IMPACT MEASURED:

Within the framework of the reporting period of IDD project the following activities have been carried out:

- Consumption of iodised salt by households significantly increased by years: in 2000 was 41.3% adequately iodized salt; 44% in 2002 increased to 70 % in 2003 and selling of iodized salt at the market increased from 30% (2002) to 68% in 2003; In 2004 consumption of iodized salt at households increased to 84%⁴. However, a WFP survey conducted in rural areas shows consumption of iodized salt to be around 66%. The latest market monitoring data from the Independent Consumer Union (2005) - shows that up to 84% of salt on the market is iodized
- Decree of the President of Azerbaijan «On Provisions of Implementation of the Law on Prevention of Iodine Deficiency Disorders and Universal Salt Iodization» (No 757) August, 2002
- Resolution of the Cabinet of Ministers «On iodine content in nutritional salt» (No 200) December, 2002.

- Decree of the President “On Strengthening the Law on Salt iodization” (No 931), September, 2003
- Technical requirements for iodized nutritional salt, December, 2003
- The Rules “On procedures of secondary processing and iodization of salt”, are developed by the Ministry of Health and are pending approval by Cabinet of Ministers.
- A Draft National Program for IDD Elimination in Azerbaijan has been developed and is to be adopted by 2006. This document will be adopted as an official Policy Paper by the Ministry of Health and, in fact, should become a National Plan of Action (NPA) for IDD Elimination.
- Technical assistance provided and consensus achieved on the results of the Evaluation of the national efforts to eradicate IDD
- The salt producers have become the members of IDD National Committee;
- Intersectoral Task Force has met regularly to monitor the activities regarding salt iodization, to measure the progress and make recommendations accordingly; advocacy meetings have been held with all counterparts and partners concerned and stake holders such as communities and families have also been involved through the participation of civil society organizations;
- Draft Monitoring Framework on the quality of iodized salt developed
- The National Communication strategy on IDD has been drafted and going to be finalized soon
- Equipments for Determination of Iodine in Urine have been procured and National Central Biological Laboratory set up in the Medical University.
- The National IDD Laboratory Training Center for the monitoring of IDD and salt iodization was provided with training equipment and training of trainers on laboratory techniques and monitoring of IDD and salt iodization was conducted;
- National seminar on advocacy, awareness and social mobilization for IDD prevention was organized with the participation of parliamentarians, MoH and MoE representatives, academics, salt producers, consumer unions, local NGOs and the mass media;
- Close collaboration with local NGOs such as Independent Consumer Union, Tradesman Union and National Youth NGOs
- IDD/USI topic was included to the curricula of education program of the Medical University of Nutrition Department.
- IDD/USI exhibition was organized in partnership with MOH;
- IDD/USI National Days were announced and celebrated during the each year of the program cycle 2003-2004
- External evaluation on IDD/USI programme conducted in October 2004.
- External evaluation of Food Fortification completed in 2004
- 370 Community members (media, NGOs, press, municipalities, executive board, youth etc.) from 37 districts, including an endemic area, received training on monitoring IDD/USI at household and market level;
- 1,030 health staff and school teachers received training during the five year program cycle period;
- 13 salt machines, 13 laboratory sets for production level, 1000 kg of potassium iodate/iodide has been procured and provided to the salt producers.
- 58,515 MBI test-kits for rapid determination of iodine in salt were supplied to salt producers, CHE and NGOs. IDD test kits were provided for joint MoH-

MoE monitoring of iodized salt at the household level, which was conducted through “child-to-child” and “child-to-mother” approaches.

- Local salt producers and Centers for Hygiene and Epidemiology (CHE) Central Customs Laboratory, the Department of Medical University received 7 sets of laboratory equipments for determination of iodine in salt;
- 10 sets of WYD salt checker have been already supplied to CHE, sanitary quarantine service and NGOs and 30 more WYD checkers will distributed later this year
- Joint MoH-UNICEF monitoring visits to endemic and IDP/R districts were organized with the aim of raising awareness. Community meetings were supported, and IDD T-shirts and caps, brochures, leaflets and posters were distributed for community mobilization;
- Monitoring of 18 salt producing factories was provided and health education activities among employees were carried out.
- 740 households (3,000 people) were monitored on IDD/USI, focusing on the quality of salt utilized in households. Measurements were taken with rapid test kits.
- Monitoring and surveillance system to properly and timely check the iodized salt production, retailing, importation/exportation and consumption is being put into place. For that purpose as well as for the purpose of checking the urinary iodine levels laboratories and other related institutions are being strengthened and all concerned personnel are being trained;
- IEC materials: 18,435 posters and 52,700 leaflets have been printed
- 7,000 T-shirts and 4,000 caps have been produced and distributed to the kids as an important advocacy event;
- IDD spots produced and broadcasted by TV channels.

4. PROJECT INFORMATION

Project strategies and activities

Strategies:

Advocacy and Social Mobilization:

- a. Policy-oriented advocacy:** Senior Government officials have been briefed and mobilised on the importance to Azerbaijani society, economic and social development, for IDD to be eliminated and that iodization of salt is the most efficient and effective intervention.
- b. Salt Industry:** Profit oriented sector both private and governmental have been sensitised on the importance of IDD elimination and their role within the programme.
- c. Community Groups:** Youth groups have spearheaded the community-based social mobilisation activities. Community leaders, teachers, NGOs have been mobilised to involve them actively in the activities, both for awareness raising purposes but also as part of the monitoring system.
- d. Marketing and Sales of Iodized Salt:**

Particular attention has been given to the availability of iodized salt at the marketing levels:

 1. Strong Information Education Communication campaigns.

2. The Consumers Unions has mobilised its networks and contacts to raise awareness of consumers on the use of iodized salt.
 3. Monitoring the compliance and enforcement of legislation prohibiting the sale of non-iodized salt in the country.
- e. **Mass Media:** There are two main public and 5 private TVs with national broadcasting and 310 newspapers. TV, radio and news spots have been developed to give messages on the seriousness of IDD and its consequences such as mental retardation, low learning achievement, goitre, and still births.

Support to the infrastructure of salt industry:

- a. **Introduction of Cost effective techniques in iodization of salt:** Basic equipment such as iodization equipment and testing kits have been provided to the salt producers and salt importers according to the technology they are using for the salt production. The producers were trained on maintenance procedures.
- b. **Establishment of quality control procedures:** Both internal and external quality control measures have been developed and established at production sites and at importation points. Testing kits have been made available for these purposes.

Monitoring:

The salt producers have been supported to regularly report on salt production and iodization levels, and their distribution patterns.

Internal Monitoring: The factories producing, importing and packing iodized salt will be given test kits and titration laboratory equipment. Training producers in proper iodization practice and methods of testing salt for proper levels of iodine content, will ensure that what leaves the factory will benefit the end user.

External Monitoring: Periodic checks as an extra guarantee to the consumer are the responsibility of the external monitors starting from production all the way down to the household. The external monitoring should be the responsibility of the government health inspectors and for this, titration equipment will be supplied for the main laboratories and training will be provided for inspectors. A second set of equipment will be provided for a second regional laboratory to be determined by the MOH.

Imports: Customs officers will be made aware of the IDD situation and how iodized salt can resolve the problem. Importers will be obliged to present certificates of quality, confirming that the salt is iodized and border officials will be given test kits so that random checks can be conducted on site.

The innovative Child-to-Child and Child-to-Mother approaches have been adopted to monitor household-level iodized salt consumption through school settings. School children will be educated by teachers on the importance of iodized salt consumption and how to check salt in their homes using rapid test kits. The children will be expected to report back to the classrooms and discuss and consolidate results and feedback to their parents.

Enhance the support system of health services:

- a. **Training of health personnel:** Health personnel have been trained on the importance of iodized salt consumption to combat IDD and its consequences. The training includes monitoring through test kits.

- b. **Establishment of a Surveillance System:** A surveillance system to record, report and provide feedback is being developed and implemented both at central and peripheral (district) levels.

5. Constraints/Failures

- Despite the training and capacity building and provision of iodization machines to the largest producers, the process of iodization does not consistently comply with international standards. Improving the quality of the iodization process, combined with more vigorous monitoring and enforcement of the law by the Government, will be pursued in 2006.
- The government has yet to establish regulations and protocols concerning iodization techniques and monitoring. Several important issues (such as licensing of salt production, quality assurance of iodized salt) are not covered by the existing regulations. Also, at present the government lacks the capacity to conduct monitoring at the production and market levels;
- Furthermore, the monitoring system in Azerbaijan is not providing comprehensive information on the amount of local production nor the quality of iodized salt. CHE Reports based only on annual data does not reflect the real situation of the iodization process at the production level, so an effective reporting system needs to be put in place.
- A system of iodate procurement has not yet been established, and there is no Salt Association in place, which could play important role for the sustainability of the program. The producers all continue to use potassium iodate (KIO₃) provided by UNICEF and stocks are almost exhausted;

6. Future Plans

Future plans for the achievement of USI and elimination of IDD centre on the need to strengthen the monitoring system, so that the Ministry of Health enforces its own laws and standards, develops standards where there are gaps, and on encouraging the salt producers to improve the quality of salt iodization. Communication and social mobilization activities will focus on maintaining demand for iodized salt and on highlighting weaknesses in the system. Specific activities include:

- Technical capacity-building assistance for monitoring, including quality assurance and control at the production and wholesale levels, and at customs. Development of national protocols and capacity-building activities for small salt producers using the General Manufacturing Practices. Capacity building and technical support of salt producers, enforcement agencies and customs
- Implementation of the communication strategy for achieving USI and IDD-elimination will be a priority for 2006. Communication activities will mobilise the media for generating political support from policy makers and influencers as well as sustaining consumer demand for iodised salt.
- Advocacy and technical assistance towards endorsement of the National IDD/USI Program and the Monitoring Framework on the quality of iodized salt. Inter-sectoral collaboration in monitoring quality of iodized salt will be facilitated.
- Mobilization of, and support to, salt producers. Associations will be established and workshops/round tables will be supported for mobilizing and motivating producers to upgrade existing techniques, and monitor salt-iodization at the production level.

- Reduction of non-iodized salt presence in the market: UNICEF will support market information collection on the magnitude of the problem and advocate for better enforcement of the law on USI.

4. Summary of Expenditures

Summary of expenditure by Year

2003	123,080
2004	134,480
2005	20,035
total	277,595

Summary of Expenditures by Activity

Activity	Expenditure USD
IEC/social mobilization	42,000
Programme supplies (salt machines, laboratory supplies, test kits, potassium iodate)	98,000
Monitoring/assessment/evaluation	27,500
Training/capacity development	45,000
Programme management/support	65,000
Total	277,500